

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A method of receiving RF signal quality information comprising the steps of:

at a first station, receiving a plurality of probe responses transmitted from an access point to the first station over a channel;

determining a current transmit rate of the probe responses;

synchronizing signal processing to the current transmit rate of the probe responses; and

processing the probe responses to determine a signal quality of the channel or a transmission protocol being used over the channel;

wherein the probe responses are transmitted in reply to probe requests generated by a second station and wherein the probe requests are transmitted from the second station to the access point and the probe requests transmitted from the second station to the access point are based on the timing of probe requests initially transmitted from the first station to the access point.

2. (original) The method of claim 1, further comprising the step of the first station generating a probe request responsive to failing to receive a probe response for a predetermined period of time.

3. (original) The method of claim 1, said synchronizing step further comprising the step of the first station delaying a start of channel monitoring.

4. (previously presented) A method for providing RF signal quality information comprising the steps of:

from a probe request generator, monitoring a channel for probe requests being transmitted by a station to a first access point;

determining a time period between successive probe request transmissions from the station to the first access point; and

from the probe request generator and in response to the probe requests being transmitted from the station to the first access point, transmitting a series of probe requests having the determined time period between successive probe request transmissions;

wherein the series of probe requests signal the first access point to transmit probe responses which are detectable by the station.

5. (original) The method of claim 4, further comprising the steps of:

halting the transmission of probe requests from the probe request generator;

from the probe request generator, monitoring the channel for additional probe requests transmitted from stations other than the probe request generator; and

continuing the transmission of probe requests from the probe request generator upon detection of additional probe requests.

6. (original) The method of claim 4, wherein said determining a time period step further comprises the step of storing a time value correlating to each of the probe requests.

7. (original) The method of claim 4, further comprising the steps of halting the transmission of probe requests from the station.

8. (original) The method of claim 4, wherein said determining a time period step further comprises the steps of:

parsing each of the probe requests;

storing a medium access control address associated with each of the probe requests; and

identifying the successive probe request transmissions from a particular station with the medium access control address.

9. (previously presented) The method of claim 4, further comprising the steps of:

from the probe request generator, monitoring the channel for probe requests being transmitted by a second station;

determining a second time period between successive probe request transmissions from the second station; and

from the probe request generator, transmitting a second series of probe requests having the second determined time period between successive probe request transmissions;

wherein the second series of probe requests signal the first access point to transmit probe responses which are detectable by the second station.

10. (previously presented) A method for providing RF signal quality information comprising the steps of:

from a probe request generator, monitoring a channel for probe responses being transmitted by a first access point to a station;

determining a time period between successive probe response transmissions; and

from the probe request generator and in response to the probe responses being transmitted by the first access point to the station, transmitting a plurality of probe requests having the determined time period between successive probe response transmissions;

wherein the probe requests transmitted from the probe request generator signal the first access point to transmit probe responses which are detectable by the station.

11. (original) The method of claim 10, further comprising the steps of:

halting the transmission of probe requests from the probe request generator;
from the probe request generator, monitoring the channel for additional probe responses; and

continuing the transmission of probe requests from the probe request generator upon detection of additional probe responses.

12. (original) The method of claim 10, wherein said determining the time period step further comprises the step of storing a time value correlating to each of the probe responses.

13. (previously presented) A device for generating probe requests comprising:

a probe request processor which receives probe requests generated by a station for transmission to a first access point and determines a time period between successive probe requests that are received from the station;

a probe request timing database which stores time stamps associated with the probe requests; and

a probe request scheduler which schedules probe request transmissions at intervals correlating to the determined time period between the received probe requests;

wherein the probe request transmissions signal the first access point to transmit probe responses which are detectable by the station.

14. (original) The device for generating probe requests of claim 13, further comprising at least one probe request timer, said probe request timer operatively communicating with said probe request schedule and timing the probe request transmissions.

15. (original) The device for generating probe requests of claim 13, further comprising a clock, said clock operatively communicating with said probe request processor to provide a current time value for each of the received probe requests.

16. (original) The device for generating probe requests of claim 13, further comprising:

- a radio for transmitting and receiving RF signals containing probe requests;
- a baseband processor operatively coupled to said radio; and
- a medium access controller operatively coupled to said baseband processor.

17. (currently amended) A system for synchronizing a radio transceiver to a wireless local area network, comprising:

a first receiver for receiving a plurality of probe responses over a channel in response to at least one probe request, wherein the probe responses are transmitted from an access point in response to probe requests transmitted from another device to the access point, wherein the probe requests transmitted from the other device to the access point are transmitted based on the timing of probe requests that are initially transmitted from the first receiver to the access point;

a processor in the radio transceiver ~~programmed~~ operable to:

initiate a probe request if no probe responses are detected at the first receiver;

stop further probe requests if probe responses in response to probe requests from the other device are received at the radio receiver; and

synchronize to the probe requests from the other device or the probe responses transmitted from the access point in response to the probe requests transmitted from the other device.

18. (canceled)